JVC

ENGLISH
DEUTSCH
FRANÇAIS
NEDERLANDS
CASTELLANO
ITALIANO

AV-28NH4SU

COLOUR TELEVISION — INSTRUCTIONS

FARBFERNSEHGERÄT — BEDIENUNGSANLEITUNG
TELEVISEUR COULEUR — MANUEL D'INSTRUCTIONS
KLEURENTELEVISIE — GEBRUIKSAANWIJZING
TELEVISOR A COLOR — MANUAL DE INSTRUCCIONES
TELEVISORE A COLORI — INSTRUZIONI

Thank you for buying this JVC colour television.
To make sure you understand how to use your new TV, please read this manual thoroughly before you begin.

ENGLISH

IMPORTANT SAFEGUARDS

1. WATER AND MOISTURE

The apparatus shall not be exposed to dripping or splashing water and no object filled with liquids, such as vases , should be placed on the apparatus.

2. HEAT

Never place the set near heat sources.
Never put a naked flame, such as a candle, on the top of TV set.

3. VENTILATION

Do not cover the ventilation openings in the cabinet and never place the set in a confined space such as in a bookcase or built-in cabinet unless proper ventilation is provided. Leave a minimum 10 cm gap all around the unit.

4. OBJECT ENTRY

Do not insert foreign objects, such as needles and coins, in the ventilation openings.

5. LIGHTNING STRIKE

You should disconnect the set from the mains and the aerial system during thunderstorms.

6. CLEANING

Unplug the set from the mains while cleaning.

7. AFTER MOVING THE SET

If the set is moved or turned, the MAIN POWER button must be switched off for at least 15 minutes in order to take out colour patches on the screen.

8. CAUTION

There is danger of choking or suffocation if the cap which is removed from the TV is accidentally swallowed by children. Store the cap out of the reach of children.

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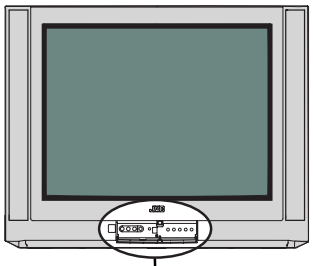
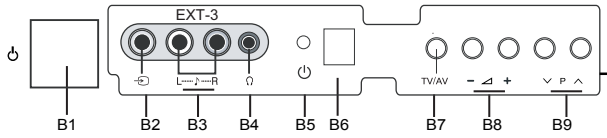
IDENTITY OF LOCAL & REMOTE CONTROL

LOCAL CONTROL

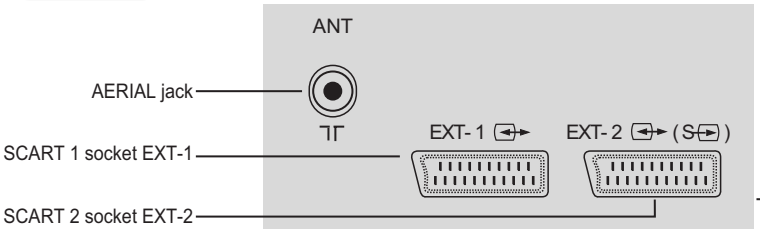
Front

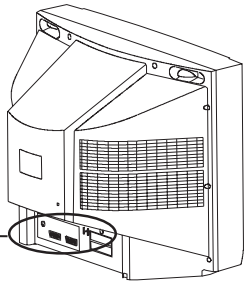
B 1 MAIN POWER button
B 2 FRONT VIDEO INPUT socket EXT-3
B 3 FRONT AUDIO INPUT socket EXT-3
B 4 HEADPHONE socket
B 5 STAND-BY indicator
B 6 REMOTE sensor
B 7 TV / AV button
B 8 VOLUME UP/DOWN buttons
B 9 PROGRAM UP/DOWN buttons





Rear



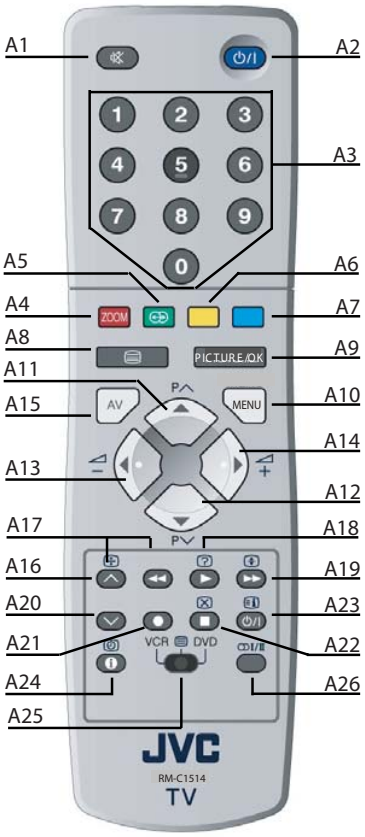


REMOTE CONTROL

TV mode

A1 SOUND MUTE
A2 ⏻/I POWER
A3 0 - 9 NUMBER 0..9
A4 ZOOM / SKIP
A5 SOUND EFFECT / MOVE
A6 SLEEP / DELETE
A7 LIST MENU
A8 TV > TELETEXT
A9 PICTURE / OK
A10 MENU
A11 PROGRAM UP (CURSOR UP)
A12 PROGRAM DOWN (CURSOR DOWN)
A13 VOLUME DOWN (CURSOR LEFT)
A14 VOLUME UP (CURSOR RIGHT)
A15 AV TV / AV
A16 Not used
A17 Not used
A18 Not used
A19 Not used
A20 Not used
A21 Not used
A22 Not used
A23 Not used
A24 INFORMATION
A25 V D VCR / TELETEXT / DVD switch
A26 MODE

RM-C1514

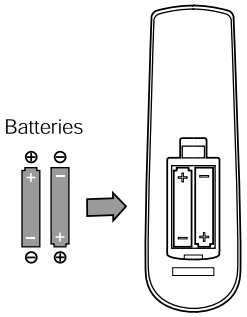


TELETEXT mode

A1 SOUND MUTE
A2 ⏻/I POWER
A3 0 – 9 NUMBER 0..9
A4 RED
A5 GREEN
A6 YELLOW
A7 CYAN
A8 TELETEXT > TV
A9 Not used
A10 MENU VOL / BRIGHT / CONTRAST MENU SELECTION
A11 PAGE UP
A12 PAGE DOWN
A13 VOL / BRIGHT / CONTRAST DOWN
A14 VOL / BRIGHT / CONTRAST UP
A15 Not used
A16 PAGE HOLD
A17 Not used
A18 REVEAL
A19 DOUBLE SIZE
A20 Not used
A21 Not used
A22 CANCEL
A23 INDEX
A24 SUBPAGE
A25 VCR / TELETEXT / DVD switch
A26 Not used

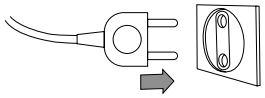
ENGLISH

SETTING UP

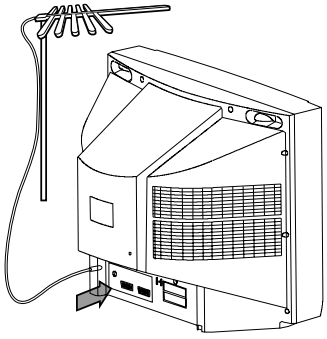


Open remote control battery compartment (at the rear) and insert two 1.5V type AA / R6 batteries.

Warning: be careful to respect battery polarities.



Insert the main plug into a 220 - 240V 50Hz AC power socket.

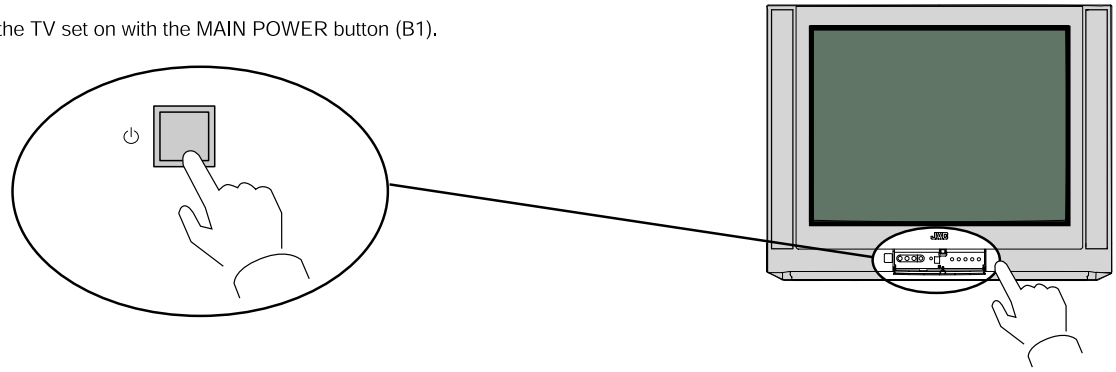


Connect aerial to aerial jack. It is usually connected by means of a 75 ohm cable.

START UP

SWITCHING ON

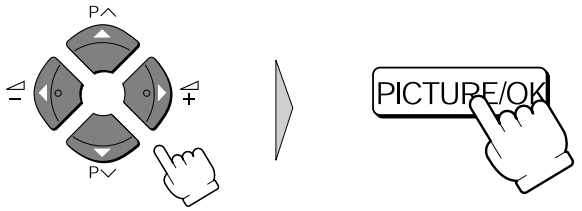
Switch the TV set on with the MAIN POWER button (B1).

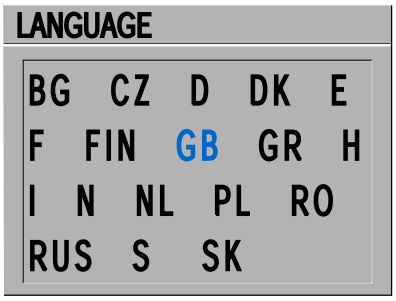


LANGUAGE MENU

The very first time that you turn on the TV, the LANGUAGE menu will appear on the screen. Its purpose is to enable you to select the language that will be used for all the OSD (On Screen Display) menus. The user must enter a choice of language before proceeding further.

The descriptions used in the menu are those of the country code (e.g. GB = English, NL = Holland etc).





Selection is made by use of the remote control CURSOR UP (A11) / CURSOR DOWN (A12) buttons and CURSOR LEFT (A13) / RIGHT (A14) buttons. Once you are satisfied with your selection, push the OK button (A9) to confirm your choice. The choice will briefly highlight in red, after which the menu will disappear.
The language entered at this stage can still be modified at any later time, by entering the LANGUAGE menu (accessed from the FEATURES menu page 9).

Note : The languages shown are subject to modification without prior notice.

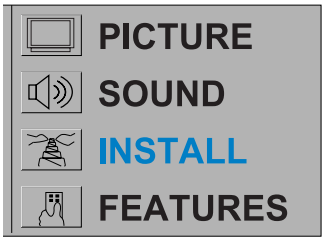
INSTALLATION

AUTO TUNING SYSTEM

MENU SELECTION

Press remote control **MENU** button (A10) to display the main menu.

Move the cursor to INSTALL by using the remote control CURSOR UP (A11),DOWN(A12) buttons.
Then Press the remote control OK button (A9).



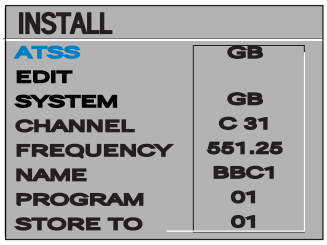
Note: All menus are removed within 60 seconds if you don't press any button.

COUNTRY SELECTION

Position the cursor at **ATSS** Menu and select country code where TV is used by pressing the remote control CURSOR LEFT (A13), RIGHT(A14) buttons.

The following countries can be selected.

A, B, CH, CZ, D, DK, E, F
FIN, GB, GR, H, I, IRL, N
NL, P, PL, S, SK, Others



ATSS - Auto Tuning and Sorting System

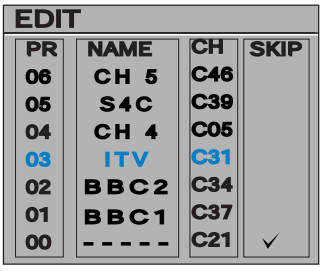
After selecting country code, press and hold OK button for 3 - 4 seconds until **"Please wait!"** is displayed, then auto program tuning starts searching all the available TV stations in your area. When auto tuning and sorting is completed, the **EDIT** menu with the recorded programs appears on the screen.

Press **MENU** button 3 times, then the menu display will disapear from TV screen. Now you can select program using the remote control UP (A11) or DOWN (A12) buttons.

EDIT MENU

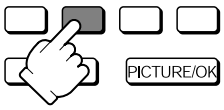
The **EDIT** menu shows you the programme position assignment. When using the **AUTO TUNING** method, the broadcasts may not be found and stored in the order you desired. For example, BBC1 may not be allocated to programme number 01, and BBC2 may not be allocated to programme number 02, etc. The **EDIT** menu enables you to change the programme position assignment according to your personal preference.

To reach the **EDIT** menu you have to first select **INSTALL** menu from the **MAIN** menu.



CHANGING ORDER OF CHANNELS

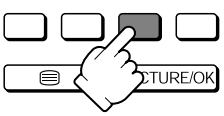
Position the cursor to the programme number you want to move and press the remote control **GREEN (A5)** MOVE button. The programme turns to red colour then use the UP (A11) or DOWN (A12) buttons to move the programme number you wish to store it to and press **MOVE** button again to confirm the operation. Press MENU to return to EDIT menu.



DELETE PROGRAMME POSITION DATA

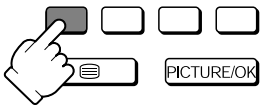
Position the cursor to the programme number you wish to delete using the remote control UP (A11) or DOWN (A12) buttons. Press the **YELLOW/DELETE** (A6) button.

The delete programme is instantly moved to programme NR 99. The programme which was located at NR 99 will automatically move to NR 98.



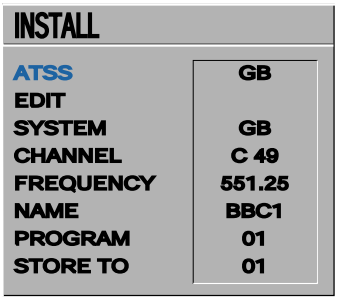
SKIPPING THE CHANNELS

Position the cursor to the programme number you wish to skip, then press the **RED** (SKIP)(A14) button. A skipped programme is marked with the sign " ✓ " at its right end. The channel corresponding to a skipped programme will not appear on screen when changing channels using PROGRAM **UP** (A11) / **DOWN** (A12) buttons.



MANUAL CHANNEL TUNING

Tuning by **ATSS** (Auto Tuning Sorting System) is recommendable, as it is the easiest tuning method. But Manual Tuning is also possible using the following procedure.



BROADCASTING SYSTEM SELECTION

Select **INSTALL** Menu and using the remote control CURSOR UP (A11) / DOWN (A12) buttons, move the cursor to **SYSTEM** menu and select the appropriate system by the LEFT (A13) or RIGHT (A14) button.

"FRANCE"	France SECAM L/L'
"GB"	Great Britain / Ireland PAL-I/I'
"EURO"	Westen Europe PAL-SECAM B/G
"E.EURO"	Eastern Europe PAL-SECAM D/K

ACTIVATING MANUAL TUNING

Move the cursor to FREQUENCY (channel frequency) menu and press the remote control CURSOR LEFT (A13) or RIGHT (A14) buttons.

When one channel is tuned, the corresponding station name is indicated automatically.

To tune the next channel, press the remote control **CURSOR LEFT** (A13) or **RIGHT** (A14) buttons again.

CHANNEL AND FREQUENCY MENU

If you know the channel or frenquency number you want to search, enter the data by 0...9 buttons.
TV will tune that channel quickly.

STORING CHANNEL NAME

When one channel is tuned, the corresponding station NAME will be detected automatically. But in some cases, NAME will not be detected due to the broadcasting situation. You may put in the channel NAME yourself.

Position the cursor to **NAME** and press the remote control CURSOR RIGHT(A14) button. A green flashing cursor appears on the left end of NAME line ("-----"). Then press CURSOR UP (A11) or DOWN (A12) buttonss untill you get the right letter or symbol. Move the cursor to the next position by using CURSOR LEFT (A13) or RIGHT (A14) buttons and repeat the operation. Press OK (A9) button to store the NAME.

PROGRAM MENU

The number on the right side of the PROGRAM menu indicates the program number of the currently displayed channel.

STORE TO MENU

Select **STORE TO** menu and select the program number by 0....9 buttons or CURSOR LEFT (A13) or RIGHT (A14) buttons to which you want to store the currently displayed channel then press OK button.

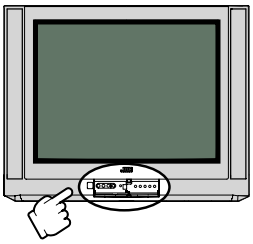
Warning ! If you store to a number already programmed the previous programmes will be erased automatically.

DAILY USE

SWITCHING ON AND OFF TV SET

SWITCHING ON

Swich the set ON with the POWER (ON/OFF) button ⏻ (B1) (ON/OFF) and then PROGRAMME (PR) UP or DOWN buttons (B9) on the front of the set. Or POWER button or UP/DOWN button or one of the NUMBER buttons on the remote control.



SWITCHING OFF

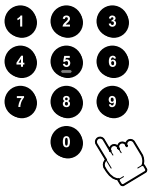
Press POWER button (A2) on the remote control to return the set to its STAND BY mode. If you don't use the set for an extanded period of time, turn it off with MAIN POWER button (B1) on the set. In such case, firstly press POWER button (A2)on the remote control and then press POWER button (B1) on TV set.

PROGRAM SELECTION (FROM 0 TO 99)

11	-------
10	-------
09	-------
08	-------
07	-------
06	CHANNEL 5
05	S4C
04	CHANNEL 4
03	ITV
02	BBC2
01	BBC1
00	-------
99	-------
98	-------
97	-------
96	-------
95	-------
94	-------
93	-------
92	-------
91	-------

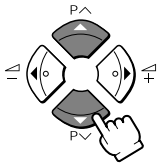
Direct selection

Use the remote control NUMBER 0..9 buttons (A3). For two digit program numbers, enter the second digit within 2 seconds.



Up / Down selection

Use the remote control PROGRAM UP (A11) / DOWN (A12) buttons or the TV set front panel PROGRAM UP / DOWN buttons (B9).



LIST menu

Press on the **CYAN** button (A7) to display the **LIST** menu. Then use the CURSOR UP (A11) or DOWN (A12) buttons to browse the list and find a program, with the aid of the program numbers plus associated names (see section Manual Channel Tuning p5 for how to add or modify program names).

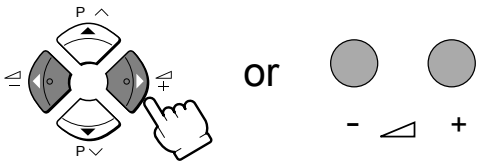
When you have found a program you want to select (the highlighted line in the middle of the menu), press on the **OK** button (A9) to tune this program. The **LIST** menu will disappear at the same time.

If you decide to keep the current program, the menu can be cancelled at any time by pressing on the **CYAN** button (A7).

SOUND CONTROL

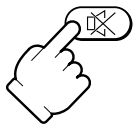
Volume adjustment

Use the remote control VOLUME UP (A14)/DOWN (A13) buttons or the TV set front panel VOLUME UP/DOWN buttons.



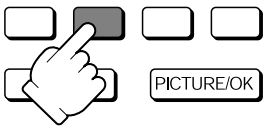
Mute

- Mute the sound by pressing the remote control SOUND MUTE button (A1).
- Then, logo is displayed. The previous sound setting is returned after pressing the same button a second time.
- If a sound related function is used (e.g. VOLUME,) then the MUTE will also be cancelled.

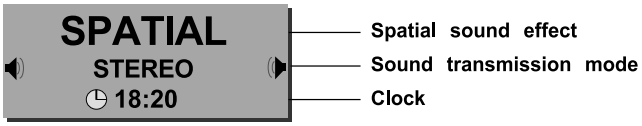


Sound effects

A SPATIAL sound effect is available, by using the remote control (A5) button.

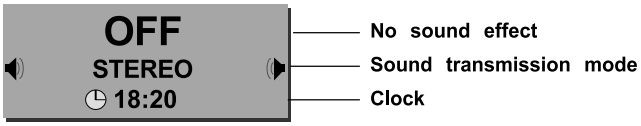


The following display appears:



To return to initial sound effect, press again the (A5) button.

The following display appears:



For other adjustments such as BALANCE, BASS or TREBLE, use the SOUND menu (here under).

Mono forcing, dual language

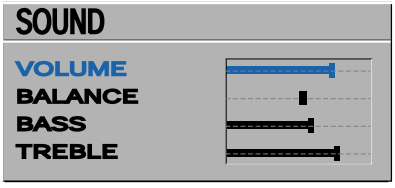
- If you are unable to get good sound quality for a program due to poor reception, you can force a change from stereo to mono transmission by pressing the remote control **MODE** button (A26) Then the program status display will indicate "MONO" with a icon.

- On the other hand, during a program with dual language transmission, the **MODE** button (A26) allows you to toggle between the first and second language. The program status display will indicate "DUAL 1" or "DUAL 2" (plus NICAM according to the received signal).
- To return to initial state, press again the **MODE** button (A26).

SOUND MENU

Select SOUND menu from the MAIN menu.

- Select VOLUME function to adjust the volume level.
- Select BALANCE function to adjust sound balance between the left and right speakers. If the indicator is highlighted in red, then the central balance position has been found.
- Select the **BASS** and **TREBLE** functions to adjust the tone levels.



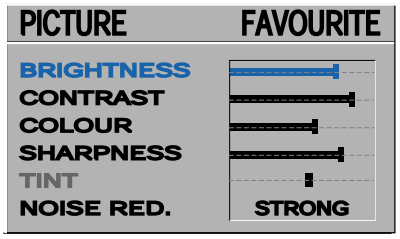
ENGLISH

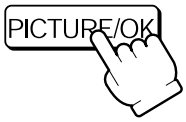
PICTURE CONTROL

Select PICTURE menu from the MAIN menu.

- Select and adjust the level of each function: BRIGHTNESS, CONTRAST, COLOUR, SHARPNESS, TINT (if available) and NOISE REDUCTION.
- The above modified values are automatically stored in FAVOURITE mode.
- NOISE REDUCTION feature has 4 levels according to your preference.
- The FAVOURITE preset contains the settings that you last entered.

If the NTSC standard is detected (eg from VHS player connected to EXT-1), then TINT will be available. Otherwise TINT will be displayed, but not selectable.



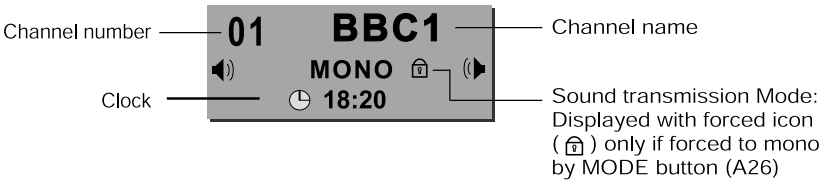


You can select three pictures settings, by using the remote control PICTURE/OK button (A9) :

- Normal I (standard hard picture)
- Normal II (standard soft picture)
- Favourite.

PROGRAM STATUS DISPLAY (INFORMATION)

Use the remote control ⓘ button (A24) to display (for 4 seconds only) program status information. This display appears also after a program selection or after switching on the TV set.

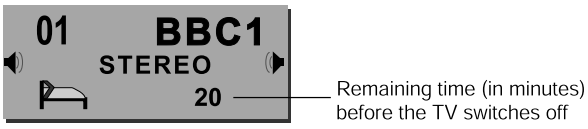


SLEEP FUNCTION

The set will turn off (to stand-by mode) after a period of time that you can select. By repeated use of the remote control **YELLOW** button (A6), you can enter one of the following settings :

OFF > 20 min > 40 min > 60 min > 80 min > 100 min > 120 min > OFF

The SLEEP time remaining (before TV turn-off) can be seen again at any time by one touch on the remote control **YELLOW** button (A6). A second touch (while the status display is active) will modify the SLEEP time remaining.



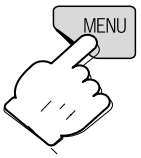
FORMAT SELECTION

AUTO setting: If picture format signalling data is received, then the most appropriate ZOOM format will be automatically selected. In the absence of this data, the default ZOOM format will be selected (see page 9, ZOOM AUTO function under FEATURES MENU).
Otherwise, the preferred mode of the user can be forced by repeated pressing of the remote control **ZOOM** button (A4): The following picture formats are available:

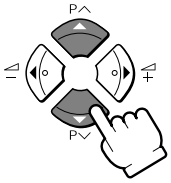
AUTO> 14:9 > 16:9 > FULL SCREEN > AUTO.

FEATURES MENU

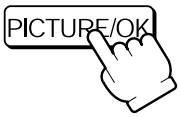
Select the FEATURES MENU from the main MENU as follows :



Press on the button MENU



Position cursor on FEATURES menu



Press on the OK button

FEATURES menu content the following sub-menus.

1. When switched to ON:
Prevents the use of the TV set without remote control.

2. Wake up function
This function is only selectable when the clock is set. The TV set turns on from stand-by at the WAKE TIME and with the programme entered on the WAKE PROG. line. Put the TV set on stand-by with the remote control.

3. Shared with WAKE TIME.

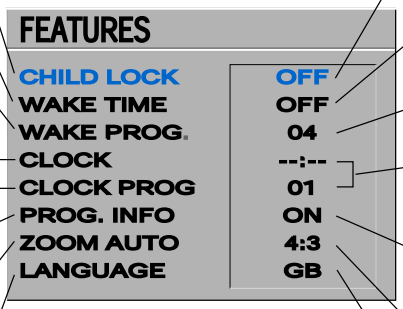
4. TV clock setting
This function allows user to enter the time manually.

Note : If you turn off the set with the main power button, the clock setting is lost. An automatic attempt is made to set the clock again at power on.

5. Programme Information function
This status information is under the editorial control of the transmitting station, and can contain the programme title.

6. This function is only selectable when the default picture format is currently active (see also FORMAT SELECTION, AUTO setting, page 8). This selects the default format to be used only when the format selected with the ZOOM button (A4) is AUTO, and no picture format signalling data is received.

7. LANGUAGE menu entry



1. Adjust this value ON or OFF.
- In stand-by mode, the stand-by indicator flashes red and green to indicate the CHILD LOCK is set.
- The front panel TV buttons (B7, B8, B9) become inactive and the TV will only respond to the remote control.

2. - Switch the WAKE UP function 'OFF' or 'ON' (the time will be shown e.g. 07:15) with the remote control CURSOR LEFT (A13) / RIGHT (A14) buttons.
- Enter the wake up time with the remote control 0..9 NUMBER (A3) buttons.

3. Adjust TV turn-on program number.

4. Adjust TV clock. Clock will start at 00 seconds upon entry of the 4th figure.
The prog. no. which is used to automatically seize the time at turn on should be entered here.

5. Adjust this value ON or OFF.
- When ON, the information (if available) is displayed upon change of channel.
- When OFF, no information is displayed.

6. Choose your preferred default format with the remote control CURSOR LEFT (A13) / RIGHT (A14) buttons.

Note: FULL SCREEN is represented here by 4:3.

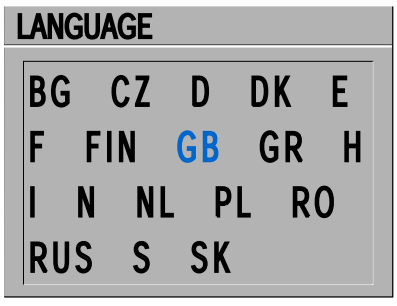
7. The currently selected LANGUAGE is displayed. Press the OK button (A9) to access the menu and change the selection.

LANGUAGE MENU

Select LANGUAGE menu from the FEATURES menu.

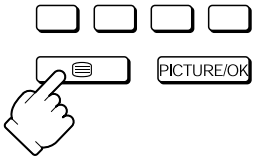
- Select the preferred LANGUAGE by use of the CURSOR LEFT (A13), RIGHT (A14) buttons, and the CURSOR UP (A11) or DOWN (A12) buttons.
- Press the OK button (A9) to confirm the selection (the choice will be highlighted in red).

Note : The languages shown are subject to modification without prior notice.



TELETEXT

ENTERING/LEAVING TELETEXT MODE



- Set the VCR / ▤ / DVD switch (A25) to the ▤ (teletext) position.
- Press the remote control TELETEXT (▤) button (A8) to select teletext mode.
- To return to TV mode, press again the TELETEXT (▤) button (A8).
- **Note** : Some of the buttons may not work if the VCR / ▤ / DVD) switch is not set to the ▤ (teletext) position.

PAGE SELECTION

- You can directly enter the 3 figure page number by using the remote control NUMBER 0..9 buttons (A3).
- You can sequentially select teletext pages by pressing the remote control PAGE UP (A11) / DOWN (A12) buttons.

COLOUR buttons FOR TELETEXT

- A red, green, yellow, and blue field is shown at the bottom of the screen. If TOP or FLOF teletext (FASTTEXT) is transmitted by the station, pressing the corresponding colour button on the remote controller, you can select the desired page easily.

Once a request is made, the page number is shown in the extreme top left corner of the screen. If the requested page is not immediately available the rolling header will be active until the page arrives.

USEFUL TELETEXT FUNCTIONS

INDEX button ▤ (A23):

Allows you to return directly to the initial teletext page.

PAGE HOLD button ▤ (A16)

Several sub pages can be combined under a page number and are scrolled at an interval determined by the television station. The presence of sub pages is indicated by, for example, 3/6 beneath the time, which means that you are looking at the 3rd page of a total of 6 pages. If you want to look at a subpage for a longer period of time, press the HOLD button. "▤ " appears at the top of the screen and the contents of the subpage shown are kept on the screen and no longer updated or switched to other subpages. Pressing the HOLD button again, the current subpage appear'

SUBPAGE button ▤ (A24):

Allows you to request a specific subpage:

- Press the SUBPAGE button. At the base of the screen a SUBPAGE menu will appear. This has a red subpage minus link, a green subpage plus link, plus a white background showing (example for page 110), 110 / 0001. This is ready to accept the subpage number.
- Enter directly the subpage number you want with the remote control NUMBER 0..9 buttons (A3): for example to request the 2nd subpage, type 0002.
- Alternatively, use the red subpage minus link or the green subpage plus link.
- The subpage number entered is shown at the base of the screen.
- If the requested page is not immediately available the rolling header will be active until the page arrives.

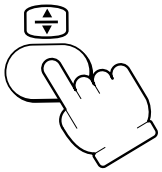
Warning: If the subpage is not available (does not exist), then the header will roll continuously and no new page will be found.

- To exit subpage mode, press the SUBPAGE button (A24) again.

Note: Teletext specification allows for subpage numbers 0000 to 3979 (the first figure is limited to the range 0..3, and the third figure 0..7).

DOUBLE SIZE button (A19)

Repeadly pressing the SIZE button doubles the character size in the following order :Upper half of the page > Lower half of the page > Return to normal size



If the page is in UP or DOWN mode, then normal size is automatically set if
- A new page request is made (e.g CYAN, INDIX or PAGE UP /DOWN).
- A CANCEL mode (A22) function is used.
- VOLUME menu is activated with the MENU button (A10)

Note ; The menu at the base of the screen is always visible.

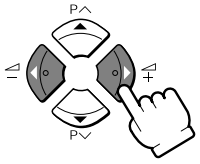
REVEAL ANSWER button (A18)

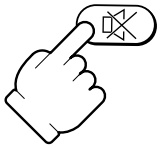
This fonction can be used on certain pages to reveal the solution of riddles. Press the **REVEAL** button to reveal a hidden answer and press again to hide it.

VOLUME, BRIGHTNESS & CONTRAST CONTROL

VOLUME (and sound MUTE), BRIGHNESS and CONTRAST controls are all possible in teletext mode. The BRIGHTNESS and CONTRAST controls are dedicated to the teletext display.

- Access the VOLUME control by pressing the MENU button (A10) in teletext mode. A bargraph will appear in the lower part of the screen (as in TV mode). If MUTE is active, a mute icon is also shown.
- A second press on the MENU button (A10) will access the BRIGHTNESS control, and a third press the CONTRAST control.
- The active bargraph will timeout after 3-4 seconds (as in TV mode VOLUMEcontrol) or by pressing on the MENU button (A10) a fourth time (after CONTRAST control)

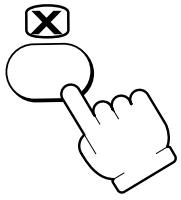




- Each control can be adjusted by using the remote control CURSOR LEFT (A13) / RIGHT (A14) buttons.
- Mute can always be activated by pressing the SOUND MUTE button (A1).
- Any change to the VOLUME level will cancel the SOUND MUTE.

WATCHING TV WHILE PAGE SEARCHING

The CANCEL function can be used to make the teletext page transparent, thus revealing the TV picture:
- To enter cancel mode, press the CANCEL ⊠ button (A22) while in teletext mode. The TV program will reappear on the screen, while only the teletext page number remains at the top and left corner of the screen.
- You can enter a new page number in this mode only by using the remote control NUMBER 0..9 buttons (A3), or with the INDEX button (A23).
- If a page has been requested, but has not yet arrived, "???" flashing characters will be displayed until the page arrives. Otherwise, the same characters will be displayed without flashing until the next arrival of the page in the transmission cycle. Once arrived the page number will be displayed.
- The teletext page can be made visible again by pressing the CANCEL ⊠ button (A22).
- It should be noted that the TV program cannot be changed while in cancel mode.



WATCHING TV WITH TELETEXT SUBTITLES

If the actual teletext page is a news flash or subtitle page, then most of the TV picture becomes visible. In this situation the ZOOM format chosen in TV mode is reactivated, where possible.

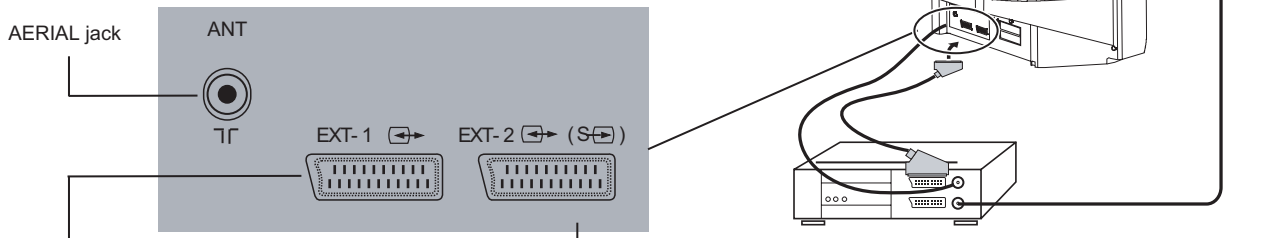
CONNECTING EXTERNAL EQUIPMENT

The rear Scart EXT-1, Scart EXT-2 sockets, the front EXT-3, are three dedicated sockets to connect audio-video equipment.

Rear

VCR / DVD / Video Game / Pay-TV decoder

Important: If your video equipment does not have SCART socket(s), or if you wish to use only the aerial (RF) connection (not recommended), then you should make use of program number 00 on the TV set for best performance.



REAR SCART SOCKET (EXT-1)

This socket has video / audio inputs and outputs. It is recommended to connect to this socket automatic AV switching equipment such as pay-TV decoders, video games, DVD players and most VCR's.

In most cases, when connecting powered equipment to this socket, the TV set switches automatically to AV mode. If not, then use the AV buttons (A15 or B7) to select EXT-1.

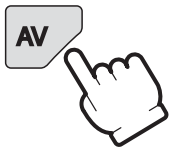
REAR SCART SOCKET (EXT-2)

This socket has video / audio inputs and outputs. Automatic AV switching equipment (for example most VCR's) can be connected to this socket. In most cases, when connecting powered equipment to this socket, the TV set switches automatically to AV mode. If not, then use the TV/AV buttons (A15 or B7) to select EXT-2.

You can also receive an S-VHS signal by selecting AV S with the AV buttons (A15 or B7).

Front

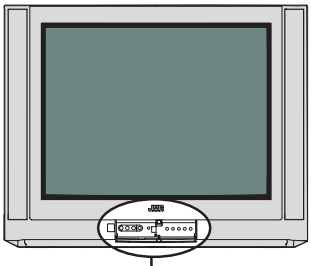
TV/AV SELECTION

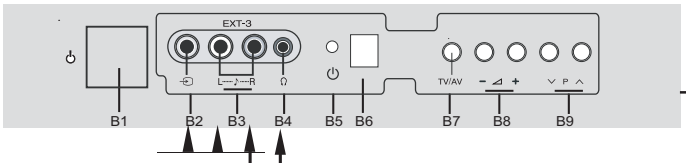


Allows to switch between TV and external modes. By repeatedly pressing the remote control TV / AV (A15) or the TV front panel TV /AV button, the on-screen display is changed as shown :

EXT-1 > EXT-2 > EXT-2 S > EXT-3 > TV

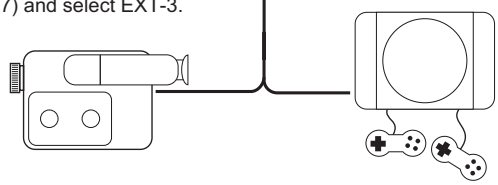
Remark: If the signal source from the rear SCART socket (EXT-1) is RGB (e.g.normally from a DVD player) then EXT-1 RGB will be displayed.





FRONT AV SOCKET (EXT-3)

The front AV socket has audio and video inputs. To switch from TV to these inputs, use the TV / AV buttons (A15 or B7) and select EXT-3.



CAMCORDER OR VIDEO GAME

HEADPHONE SOCKET

To hear TV sound with headphones, insert a 3.5mm headphone plug into the headphone socket. The speaker's sound will be automatically cut off.

TROUBLESHOOTING

● If the plug is disconnected from the AC socket, or the TV aerial has problems, you may think there is a problem with the TV itself. Be sure to check the following before calling for service.

IMPORTANT

● Review all instruction in this manual

	PROBLEM	ACTION
■ GENERAL	The TV cannot be turned on.	● Insert the plug in an AC socket. ● Turn the main power on. (See page 3) ● The buttons on the front panel of the TV will not work if the CHILD LOCK is operating (see FEATURES menu, on page 9). Use the POWER button on the remote control to turn the TV on.
	No picture or sound.	● Check aerial connections. (See page 3). ● Select the correct input source (See page 12). ● Change the SYSTEM setting manually (see Manual Channel Tuning on page 5).
	The TV shuts off automatically.	● Did you set the SLEEP function? (See page 8). ● If the broadcast signal is not present for about 30 minutes, the set will be automatically turned off. ● For safety reasons, the TV will automatically turn off if no operations are made within approximately 3 hours after the TV is turned on with the WAKE UP function.
	The TV turns on automatically.	● Did you set the WAKE UP function? (See page 9).
	Inoperable remote control.	● Replace the batteries. (See page 3). ● Insert the batteries correctly. (See page 3). ● Use the remote control within about 7 metres of the TV.
■ PICTURE	Poor colour.	● Change the SYSTEM setting manually (see Manual Channel Tuning on page 5).
	Lines or streaks in picture (interference)	● Move any external equipment away until the interference is eliminated. ● Reposition the aerial.
	Spots (crosstalk)	● Reposition the aerial. ● Replace with an aerial with better directionality.
	Double pictures (ghosts)	● Reposition the aerial. ● Replace with an aerial with better directionality.
	Snowy pictures (noise)	● Check aerial connections. ● Redirect the aerial. ● Replace or repair the aerial.
■ SOUND	No sound from the TV's speakers	● Disconnect the headphones.

The following are normal and are NOT malfunctions:

● When touching the picture tube surface, you might feel a slight charge of static electricity. This is because the picture tube contains static electricity; it does not affect the human body.

● The TV may emit a crackling sound due to a sudden change of temperature. There is no problem unless the picture or sound is abnormal.

● When a still, bright image (of a white dress, for example) appears on the screen, the image may be coloured. This problem occurs in all picture tubes, and as the bright image disappears, the colour also disappears.

● This TV is equipped with a microcomputer that may operate abnormally due to interference from external equipment. If this happens, turn off the main power and disconnect the power cord from the AC socket. Then reconnect the power cord to the AC socket and turn on the main power again.

SPECIFICATIONS

Item \ Model	AV-28NH4SU
Broad casting systems	*CCIR B/G, I ,D/K, L/L'*
Colour systems	*PAL, SECAM* *The EXT terminals also support the NTSC 3.58/4.43 MHz system.*
Channels and frequencies	** E2-E12, E21-E70, S1-S41, X, Y, Z, Z+1, Z+2, ITALY A-H, ITALY H+1, ITALY H+2, F2-F10, F21-F70, R1-R12, R21-R70* ** French cable TV channel of broadcast frequencies 116 - 172 MHz and 220 - 469 MHz*
Sound-multiplex systems	*A2 (B/G, D/K), NICAM (B/G, D/K, I, L) systems*
Teletext systems	*FLOF (Fastext) / TOP / WST (World standard system)*
Power requirements	*AC 220-240V, 50 Hz*
Power consumption	*74W, stand-by 3W*
Picture tube size	*Visible area 66cm (measured diagonally)*
Audio output	*Rated Power output: 7W + 7W*
EXT-1 terminal	*Euroconnector (21-pin,SCART)* ** Video input, Audio L/R inputs and RGB inputs are available* ** TV broadcast outputs (Video and Audio L/R) are available.*
EXT-2 terminal	*Euroconnector (21-pin, SCART)* ** Video input, S-VIDEO (Y/C) input, Audio L/R inputs are available* ** Video and Audio L/R outputs are available*
EXT-3 terminal	*RCA connectors x 3* ** Video input and Audio L/R inputs are available.*
Headphone jack	*Stereo mini-jack (3.5mm in diameter)*
Dimensions (W x H x D)	*747 mm x 596 mm x 480 mm*
Weight	*31.5 kg*
Remote control unit	*RM-C1514, battery AA / R6 x 2*

Design and specifications are subject to change without notice

Pictures displayed on the screen using this TV's image processing functions should not be shown for any commercial or demonstration purpose in public places (tearooms and halls in hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this constitutes an infringement of copyright.

JVC

VICTOR COMPANY OF JAPAN, LIMITED

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